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SEATTLE FIRE DEPARTMENT

Information Bulletin #973

Fire Escape Testing

Fire escapes may be used during emergencies by both building occupants and fire fighters. To ensure that fire escapes work properly, they must be tested every five years.

WHO CAN TEST

Following are the approved methods of testing fire escapes.

■ *The building is a high-rise, or a load test is required by the Department of Construction and Land Use as a permit condition.*
A load test program must be prepared by a licensed structural engineer and approved by the Department of Construction and Land Use.

■ *The building is not a high-rise, and load testing is not required by permiting.*
In this situation there are two options.
1) The testing may be performed by the building owner or their representatives.
2) A licensed structural engineer may provide certification that the fire escape is structurally safe and will support a load of 100 pounds per square foot (psf).

There are professional testing agencies listed in the phone book. Check the yellow page listings under *fire escapes* and *fire protection*.

SELF-TESTING METHOD

The fire escape test consists of placing a load equal to 100 psf on a landing and one adjacent stair (up or down) for at least 10 minutes. This procedure is repeated until all landings and adjacent stairs are tested. The load may consist of cases of food or beverages, containers of water, bags of sand, or any other material in sufficient quantity to provide the required weight.

The fire escape structural members and connections should be visually inspected both before and after application of the loads. The entire fire escape must be checked for rust, and painted if needed. Hand rails must be physically checked for integrity. Loose bolts, grates, and framework should be tightened, repaired, or replaced as necessary. The ladder must be checked for unauthorized modification. Building codes under which fire escapes were installed normally require that the ladder extend from a point not more than nine feet above the ground to at least two feet above the roof or parapet.

If a failure occurs as a result of the test, or if visual inspection determines that structural upgrading is required, the work must be performed with a Department of Construction and Land Use permit. For information on the Department of Construction and Land Use requirements, call 684-8850.